

Yongse V913

WLtoys V913 Brushless Version 2.4G 4CH RC Helicopter BNF Instruction Manual

Model: V913 | Brand: Yongse

1. INTRODUCTION

This manual provides essential instructions for the safe and effective operation, setup, and maintenance of your WLtoys V913 Brushless Version 2.4G 4CH RC Helicopter. Please read this manual thoroughly before operating the helicopter to ensure proper function and to prevent damage or injury.



Image 1.1: Front view of the WLtoys V913 Brushless RC Helicopter, showcasing its main rotor, tail rotor, and landing skids.

The WLtoys V913 is a 4-channel remote-controlled helicopter featuring a brushless motor for enhanced efficiency and power. It is designed for both indoor and outdoor flight, offering stable performance thanks to its 2.4 GHz gyroscope system. This model is a Bind-N-Fly (BNF) version, meaning it requires a compatible 2.4G 4CH transmitter (sold separately) for operation.

2. SAFETY INFORMATION

Operating a remote-controlled helicopter requires caution. Failure to follow safety guidelines can result in injury or property damage. Always prioritize safety.

- **Read the Manual:** Understand all instructions before first flight.
- **Age Recommendation:** This product is recommended for users 11 years and up. Adult supervision is advised for younger operators.
- **Flight Environment:**
 - Fly in open areas, away from people, animals, buildings, trees, and power lines.
 - Avoid flying in strong winds or adverse weather conditions.
 - Do not fly near airports or restricted airspace.
- **Battery Safety:**
 - Use only the specified 7.4V 1500mAh Li-Ion battery for the helicopter.
 - Charge batteries using the original charger or a compatible Li-Ion charger.
 - Never leave charging batteries unattended.
 - Do not overcharge or over-discharge batteries.

- Keep batteries away from heat sources and direct sunlight.
- If a battery becomes swollen, punctured, or damaged, discontinue use immediately and dispose of it safely.
- **Rotor Blades:** The rotor blades spin at high speeds and can cause serious injury.
 - Keep hands, face, and loose clothing away from rotating blades.
 - Ensure the helicopter is powered off before handling or adjusting blades.
- **Water and Moisture:** Keep the helicopter and its electronic components away from water and moisture to prevent damage.
- **Interference:** Avoid flying near other 2.4G devices that may cause signal interference.

3. PACKAGE CONTENTS

Upon opening the package, verify that all components are present and in good condition:

- 1 x WLtoys V913 Brushless Version RC Helicopter (Body Only)
- 1 x Rechargeable 7.4V 1500mAh Li-Ion Helicopter Battery (pre-installed or separate)
- 1 x Battery Charger (for 7.4V 1500mAh Li-Ion battery)
- Instruction Manual (this document)

***Note:** This is a Bind-N-Fly (BNF) model. A compatible 2.4G 4CH remote control transmitter is required and sold separately. Transmitter batteries are also not included with this package.*

4. SETUP

4.1. Charging the Helicopter Battery

1. Connect the 7.4V 1500mAh Li-Ion helicopter battery to the provided charger.
2. Plug the charger into a suitable power source.
3. Observe the charger's indicator light. It will typically show red during charging and turn green when fully charged.
4. Charging time is approximately 60 minutes. Do not exceed this time to prevent overcharging.
5. Once charging is complete, disconnect the battery from the charger.

4.2. Installing the Helicopter Battery



Image 4.1: Side view of the helicopter showing the battery compartment and internal wiring. The battery is secured with a strap.

1. Ensure the helicopter's power switch is in the "OFF" position.
2. Locate the battery compartment, usually on the underside or within the main frame.
3. Carefully insert the fully charged 7.4V 1500mAh battery into the compartment.
4. Secure the battery using any provided straps or clips to prevent movement during flight.
5. Connect the battery's power connector to the helicopter's power port. Ensure the polarity is correct.

4.3. Transmitter Setup and Binding (Requires Separate Transmitter)

Refer to your specific 2.4G 4CH transmitter's instruction manual for battery installation and initial setup. Once your transmitter is ready:

1. Turn on your compatible 2.4G 4CH transmitter. Ensure the throttle stick is at its lowest position.
2. Turn on the helicopter's power switch. The helicopter's indicator light will typically flash, indicating it is searching for a signal.
3. The helicopter and transmitter should automatically bind. The helicopter's indicator light will become solid when binding is successful.
4. If binding fails, turn off both the helicopter and transmitter, then repeat steps 1-3.

5. OPERATING INSTRUCTIONS

Before your first flight, ensure you are in a safe, open area, free from obstacles and people. Practice basic controls at a low altitude.

5.1. Basic Controls (Standard Mode)

The V913 offers 4-channel control, allowing for precise movements. The specific stick assignments depend on your transmitter's mode (Mode 1, Mode 2, etc.) and whether left/right hand control is switched. Consult your transmitter manual for its default mode.

- **Throttle (Up/Down):** Controls the main rotor speed, determining altitude.
- **Yaw (Turn Left/Right):** Rotates the helicopter horizontally around its central axis.

- **Pitch (Forward/Backward):** Tilts the helicopter's nose up or down, moving it forward or backward.
- **Roll (Left/Right Side Fly):** Tilts the helicopter left or right, causing it to move sideways.

5.2. First Flight Tips

1. **Pre-Flight Check:** Ensure blades are secure, battery is charged, and transmitter is bound.
2. **Take-off:** Slowly increase throttle until the helicopter lifts off smoothly. Avoid sudden movements.
3. **Hovering:** Practice maintaining a stable hover at a low altitude. This is fundamental for control.
4. **Gentle Movements:** Make small, gradual adjustments to the controls. Over-correction can lead to loss of control.
5. **Landing:** Slowly decrease throttle while maintaining a level attitude. Aim for a soft landing on the skids.
6. **Night Flight:** The helicopter features a floodlight for improved visibility during low-light conditions.

5.3. Advanced Features

- **3D Action:** The V913 is capable of 3D maneuvers. This requires advanced piloting skills and should only be attempted after mastering basic flight. Refer to advanced RC helicopter piloting guides for specific 3D techniques.
- **Switchable Left/Right Hand Control:** Your compatible transmitter may offer options to switch control modes to suit your preference. Consult your transmitter's manual for details on this feature.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your WLtoys V913 helicopter.

- **Cleaning:** After each flight, gently clean the helicopter with a soft, dry cloth to remove dust, dirt, or debris. Avoid using water or solvents on electronic components.
- **Rotor Blades:**
 - Inspect main and tail rotor blades for cracks, chips, or deformation before and after each flight.
 - Replace damaged blades immediately to maintain flight stability and safety.
 - Ensure all blade screws are securely tightened.
- **Motor Inspection:** Periodically check the brushless main motor for any signs of wear or obstruction.

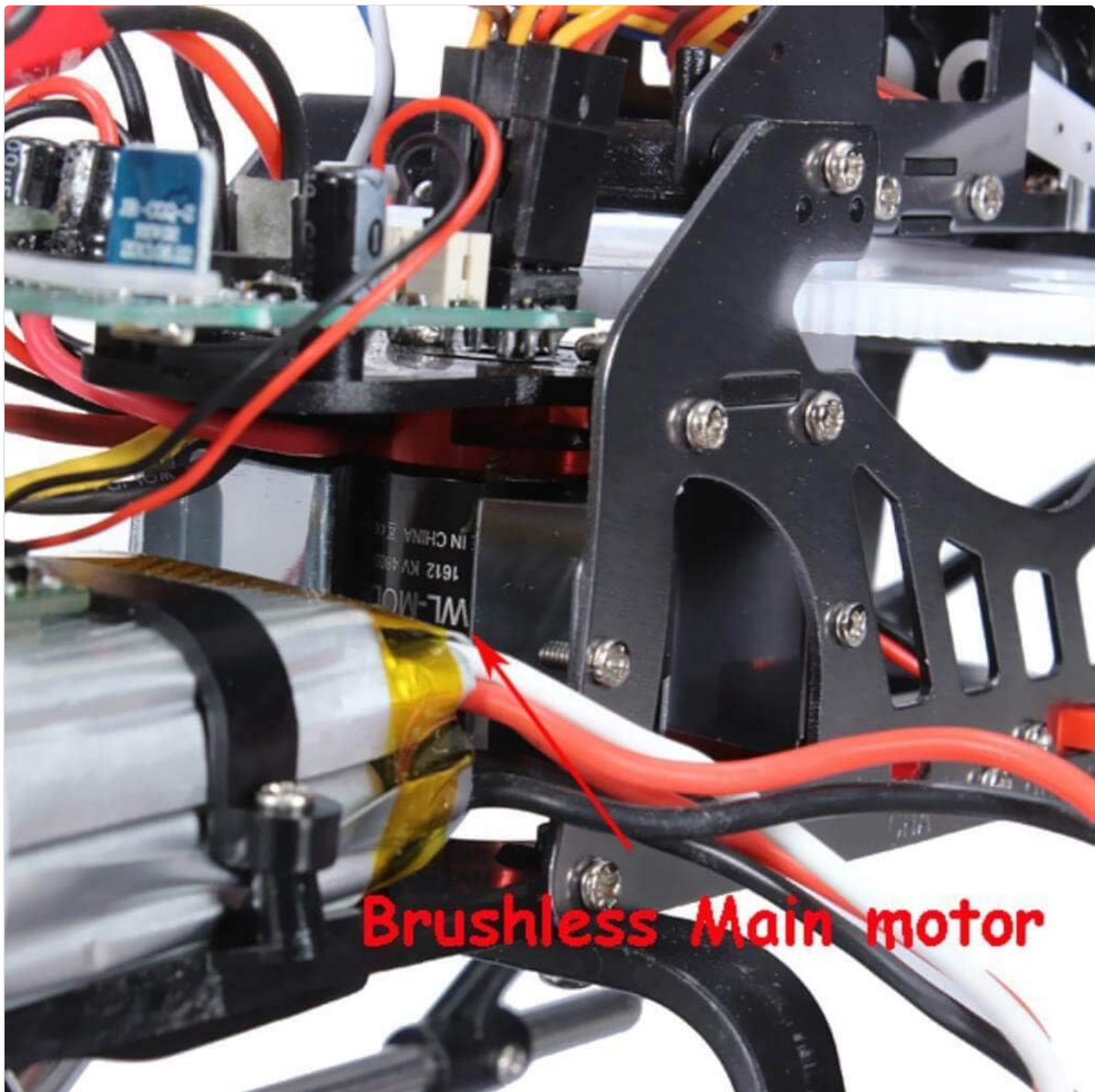


Image 6.1: Detailed view highlighting the brushless main motor, crucial for the helicopter's performance.

- **Gears and Linkages:** Inspect all gears and control linkages for smooth operation and signs of wear. Lubricate moving parts with appropriate RC-grade lubricant if necessary.
- **Battery Care:**
 - Store batteries in a cool, dry place, away from direct sunlight.
 - For long-term storage, charge Li-Ion batteries to approximately 50% of their capacity.
 - Never store fully charged or fully discharged Li-Ion batteries for extended periods.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your WLtoys V913 helicopter.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Helicopter does not respond to transmitter.	Not bound correctly. Helicopter or transmitter battery low. Transmitter not powered on.	Re-bind the helicopter and transmitter (see Section 4.3). Charge helicopter battery; replace/charge transmitter batteries. Ensure transmitter is powered on.
Helicopter flies erratically or is unstable.	Damaged rotor blades. Gyroscope calibration issue. Strong wind interference.	Inspect and replace damaged blades. Ensure helicopter is on a flat surface during power-on for proper gyroscope initialization. Fly in calmer conditions.
Short flight time.	Battery not fully charged. Battery degradation.	Ensure battery is fully charged (approx. 60 minutes). Consider replacing the battery if it's old or frequently used.
Motor not spinning.	Battery not connected or low. Motor or ESC (Electronic Speed Controller) issue.	Check battery connection and charge level. If problem persists, contact customer support.

8. SPECIFICATIONS

Feature	Detail
Product Name	WLtoys V913 Brushless RC Helicopter
Model	V913
Heli Size	70 x 12 x 21 cm
Main Rotor Diameter	50 cm
Tail Rotor Diameter	13 cm
Weight	Approx. 1200 g
Frequency	2.4G
Channels	4 channels
Control Distance	About 150 m
Flight Time	About 8 minutes
Charging Time	About 60 minutes
Helicopter Battery	Rechargeable 7.4V 1500mAh Li-Ion

Feature	Detail
Motor Type	Brushless
Material	Plastic
Special Features	2.4 GHz Gyroscope, Floodlight for night flight, Switchable left/right hand control, 3D action capability
Recommended Age	11 years and up

9. WARRANTY AND SUPPORT

9.1. Warranty Information

Specific warranty details for the WLtoys V913 Brushless RC Helicopter are typically provided at the point of purchase or within separate warranty documentation. Please retain your proof of purchase for any warranty claims. Generally, warranties cover manufacturing defects under normal use conditions.

9.2. Customer Support

For technical assistance, spare parts, or further inquiries, please contact the retailer or manufacturer's customer support channel where you purchased the product. Have your model number (V913) and purchase details ready when contacting support.

You may also find additional resources and community forums online dedicated to WLtoys RC products for tips and troubleshooting.